

**QUARTERLY GROUNDWATER
MONITORING REPORT**

Prepared for

BLACK & DECKER (U.S.) INC.

Hampstead, Maryland

January 2004

Prepared by

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1. INTRODUCTION

This Groundwater Monitoring Report has been prepared to meet the requirements of Condition IV.G of the Administrative Consent Order between the State of Maryland Department of the Environment (MDE) and Black & Decker (U.S.) Inc. (April 1995) (Consent Order). Specifically, Condition IV.G calls for preparation of a Groundwater Monitoring Report containing the following information for each reporting period:

- The quantities of groundwater pumped, treated, and discharged.
- The calculation of quantities of contaminants removed from groundwater.
- A summary of all sampling analyses.
- An explanation of all operational or other problems encountered, and the manner in which each problem was resolved.
- Copies of all reports submitted to the Department of Natural Resources in conjunction with the Groundwater Appropriations Permit.
- Recommendations for changes to the Interim Groundwater Treatment System.

This document is one of several which are being prepared in response to the Consent Order; each of these documents are to be submitted to the MDE in accordance with the schedule outlined in the Consent Order. This document will become part of the Administrative Record for the site, which is maintained at the Hampstead Public Library.

2. SITE CHARACTERISTICS

2.1 HYDRAULIC PROPERTIES

In accordance with the Consent Order and the Water Appropriation Permit issued to the Black and Decker (U.S.) Inc. Hampstead, Maryland, facility, the following pumping and water level information is included for the period of October through December 2003.

Pumping records showing the total gallons pumped per month of treatment system operation are presented in Table 2-1. The complete groundwater treatment system pumping records are included in Appendix A.

Monthly water levels for wells included in the water level monitoring plan are presented in Table 2-2. For the reporting period of October through December 2003, the extraction wells were pumping at an average combined rate of approximately 156 gallons per minute (gpm).

2.2 EFFLUENT CHARACTERISTICS

Effluent characteristics of the NPDES discharge points are recorded monthly on Discharge Monitoring Reports (DMRs) and are submitted to MDE, Water Management Administration, on a quarterly basis. A summary of the sample results from the DMRs is presented in Table 2-3. DMRs for the period of October through December 2003 are included in Appendix B.

2.3 GROUNDWATER QUALITY DATA

For the reporting period of October through December 2003, approximately 50 pounds of total volatile organic compounds (VOCs) were removed from the groundwater by the extraction and treatment system. In general, the total VOCs removed from the groundwater were comprised primarily of trichloroethene (TCE) (84 %) and tetrachloroethene (PCE) (16 %). Analytical results of the groundwater collected at the inlet to the air stripper for the period of October through December 2003 are included in Appendix C.

A summary of the analytical results from the fourth quarter (November 2003) groundwater sampling round of the extraction and monitor wells is included in Table 2-4. The complete

Table 2-1
Treatment System Pumping Records - 4th Quarter 2003
Black & Decker
Hampstead, Maryland

Date	Water Pumped (gallons)
October 2003	6,754,991
November 2003	6,313,453
December 2003	6,822,229

Table 2-2
Groundwater Elevation Data - 4th Quarter 2003
Black & Decker
Hampstead, Maryland

WELL NO.	TOC ELEV.	TOTAL DEPTH	10/31/03		11/20/03		12/29/03	
			DTW	ELEV	DTW	ELEV	DTW	ELEV
EW-1	847.21	55	DRY	NA	DRY	NA	DRY	NA
EW-2	849.21	110	64.90	784.31	63.13	786.08	64.83	784.38
EW-3	846.64	118	75.90	770.74	72.80	773.84	73.46	773.18
EW-4	858.01	97.5	NA	NA	NA	NA	NA	NA
EW-5	864.17	98	76.07	788.10	73.77	790.40	74.55	789.62
EW-6	831.98	115	64.61	767.37	64.24	767.74	64.06	767.92
EW-7	818.38	78	40.14	778.24	39.27	779.11	40.34	778.04
EW-8	811.13	98	49.95	761.18	47.77	763.36	48.52	762.61
EW-9	811.35	141	56.26	755.09	52.93	758.42	54.99	756.36
EW-10	807.74	NA	34.24	773.50	29.13	778.61	30.46	777.28
RFW-1A	864.37	78	46.59	817.78	45.66	818.71	46.53	817.84
RFW-1B	864.23	200	46.61	817.62	45.61	818.62	46.23	818.00
RFW-2A	857.41	35	13.40	844.01	11.03	846.38	12.81	844.60
RFW-2B	857.73	75	13.59	844.14	11.72	846.01	13.34	844.39
RFW-3B	839.21	153	27.71	811.50	26.29	812.92	27.46	811.75
RFW-4A	830.37	62	35.61	794.76	35.30	795.07	35.82	794.55
RFW-4B	830.37	120	35.86	794.51	35.23	795.14	35.97	794.40
RFW-5A	817.50	30	DRY	NA	DRY	NA	DRY	NA
RFW-6	785.04	120	2.61	782.43	2.86	782.18	3.54	781.50
RFW-7	805.14	29	7.91	797.23	5.44	799.70	7.67	797.47
RFW-8	860.07	56	DRY	NA	DRY	NA	DRY	NA
RFW-9	862.02	49	24.13	837.89	23.05	838.97	26.83	835.19
RFW-10	852.06	58	DRY	NA	DRY	NA	DRY	NA
RFW-11A	849.32	72	NA	NA	NA	NA	NA	NA
RFW-11B	849.62	116	66.25	783.37	64.53	785.09	65.82	783.80
RFW-12B	844.87	264	50.07	794.80	47.95	796.92	48.40	796.47
RFW-13	849.11	150	56.34	792.77	57.86	791.25	58.81	790.30
RFW-14B	812.39	281	32.61	779.78	33.06	779.33	34.19	778.20
RFW-16	856.14	41	DRY	NA	DRY	NA	DRY	NA
RFW-17	834.66	60.5	22.71	811.95	23.91	810.75	23.44	811.22
RFW-20	842.49	142	31.78	810.71	31.52	810.97	31.89	810.60
RFW-21	832.65	102	20.21	812.44	19.63	813.02	20.43	812.22
PH-7	805.94	89	26.22	779.72	25.34	780.60	19.98	785.96
PH-9	814.94	98	34.17	780.77	35.49	779.45	37.87	777.07
PH-11	820.68	78	34.08	786.60	34.85	785.83	36.81	783.87
PH-12	828.35	87	38.36	789.99	38.67	789.68	39.43	788.92
B-3	803.02	83	8.02	795.00	7.94	795.08	NA	NA
Amoco	842.29	NA	NA	NA	NA	NA	NA	NA
Hamp. Town #22	804.96	NA	19.86	785.10	21.67	783.29	22.43	782.53
Pembroke #1	NA	NA	13.43	NA	11.88	NA	12.87	NA
Pembroke #2	NA	NA	NA	NA	NA	NA	NA	NA
N. Houcks. Rd.	NA	NA	9.98	NA	10.41	NA	10.83	NA
E. Century St.	NA	NA	19.82	NA	20.43	NA	19.86	NA
Lwr. Beckleys. Rd.	NA	NA	NA	NA	NA	NA	NA	NA

NA - Not Available/Not Accessible

Table 2-3
Effluent Characteristics Summary - 4th Quarter 2003
Black & Decker
Hampstead, Maryland

Discharge Number	Parameter	Units	Permit Limits	DMR DATE		
				October 2003	November 2003	December 2003
001	FLOW	MGD	NA	0.202	0.199	0.261
		average				
		maximum		1.105	0.278	0.657
	1,1,1-Trichloroethane	ug/l	5	< 5	< 5	< 5
	Tetrachloroethylene	ug/l	5	< 5	< 5	< 5
	Trichloroethylene	ug/l	5	< 5	< 5	< 5
	Total Residual Chlorine	mg/l	< 0.1	< 0.1	< 0.1	< 0.1
	Oil & Grease	mg/l	15	< 5	< 5	< 5
		quarterly average		NR	NR	< 5
	pH	mg/l	10	6.38	6.18	6.59
		minimum		7.39	7.11	7.21
		maximum		2.4	< 2	7.9
	BOD	mg/l	15	14.0	3.5	12.0
TSS	mg/l	30	NR	NR	< 5	
	quarterly average					
101 (Monitoring Point)	FLOW	MGD	NA	0.415	0.234	0.288
		average				
201 (Monitoring Point)	Fecal Coliform	MPN/100ml	200	2.770	0.272	0.309
		maximum		< 2	< 2	< 2
FLOW		MGD	NA	0.218	0.218	0.220
		average				
1,1,1-Trichloroethane		MGD	NA	0.249	0.249	0.252
		maximum				
1,1,1-Trichloroethane	ug/l	NA	< 5	< 5	< 5	
Tetrachloroethylene	ug/l	NA	< 5	< 5	< 5	
Trichloroethylene	ug/l	NA	< 5	< 5	< 5	

DMR - Discharge Monitoring Report
NA - Not Applicable
NR - Not Reported

**Table 2-4
Summary of Groundwater Analytical Results - November 2003
Black & Decker
Hampstead, Maryland**

PARAMETER	Units	EW-1	EW-2 (10)	EW-2 (DUP) (10)	EW-3	EW-4 (10)	EW-5	EW-6	EW-7	EW-8	EW-9	EW-10
Chloromethane	ug/L	NS	100 U	100 U	10 U	100 U	10 U	10 U	10 U	10 U	NS	10 U
Bromomethane	ug/L	NS	100 U	100 U	10 U	100 U	10 U	10 U	10 U	10 U	NS	10 U
Vinyl Chloride	ug/L	NS	100 U	100 U	10 U	100 U	10 U	10 U	10 U	10 U	NS	10 U
Chloroethane	ug/L	NS	100 U	100 U	10 U	100 U	10 U	10 U	10 U	10 U	NS	10 U
Methylene Chloride	ug/L	NS	100 B	100 B	3 JB	110 B	3 JB	3 JB	3 JB	3 JB	NS	2 JB
Acetone	ug/L	NS	100 U	100 U	2 JB	100 U	2 JB	2 JB	2 JB	10 U	NS	10 U
Carbon Disulfide	ug/L	NS	50 U	50 U	5 U	50 U	5 U	5 U	5 U	5 U	NS	5 U
1,1-Dichloroethene	ug/L	NS	50 U	50 U	5 U	50 U	5 U	5 U	5 U	5 U	NS	5 U
1,1-Dichloroethane	ug/L	NS	50 U	50 U	5 U	50 U	5 U	5 U	5 U	5 U	NS	5 U
1,2-Dichloroethene (total)	ug/L	NS	50 U	50 U	2 J	50 U	5 U	5 U	4 J	19	NS	5 U
Chloroform	ug/L	NS	50 U	50 U	5 U	50 U	5 U	5 U	5 U	5 U	NS	5 U
1,2-Dichloroethane	ug/L	NS	50 U	50 U	5 U	50 U	5 U	5 U	5 U	5 U	NS	5 U
2-Butanone	ug/L	NS	100 U	100 U	10 U	100 U	10 U	10 U	2 J	10 U	NS	10 U
1,1,1-Trichloroethane	ug/L	NS	50 U	50 U	5 U	50 U	8	5 U	5 U	5 U	NS	5 U
Carbon Tetrachloride	ug/L	NS	50 U	50 U	5 U	50 U	5 U	5 U	5 U	5 U	NS	5 U
Bromodichloromethane	ug/L	NS	50 U	50 U	5 U	50 U	5 U	5 U	5 U	5 U	NS	5 U
1,2-Dichloropropane	ug/L	NS	50 U	50 U	5 U	50 U	5 U	5 U	5 U	5 U	NS	5 U
cis-1,3-Dichloropropene	ug/L	NS	50 U	50 U	5 U	50 U	5 U	5 U	5 U	5 U	NS	5 U
Trichloroethene	ug/L	NS	1100	###	360 D	2200 D	690 D	10	4 J	11	NS	5 U
Dibromochloromethane	ug/L	NS	50 U	50 U	5 U	50 U	5 U	5 U	5 U	5 U	NS	5 U
1,1,2-Trichloroethane	ug/L	NS	50 U	50 U	5 U	50 U	5 U	5 U	5 U	5 U	NS	5 U
Benzene	ug/L	NS	50 U	50 U	5 U	50 U	5 U	5 U	5 U	5 U	NS	5 U
Trans-1,3-Dichloropropene	ug/L	NS	50 U	50 U	5 U	50 U	5 U	5 U	5 U	5 U	NS	5 U
Bromoform	ug/L	NS	50 U	50 U	5 U	50 U	5 U	5 U	5 U	5 U	NS	5 U
4-Methyl-2-pentanone	ug/L	NS	100 U	100 U	10 U	100 U	10 U	10 U	10 U	10 U	NS	10 U
2-Hexanone	ug/L	NS	100 U	100 U	10 U	100 U	10 U	10 U	10 U	10 U	NS	10 U
Tetrachloroethene	ug/L	NS	67	63	8	48 J	33	24	8	71	NS	6
1,1,2,2-Tetrachloroethane	ug/L	NS	50 U	50 U	5 U	50 U	5 U	5 U	5 U	5 U	NS	5 U
Toluene	ug/L	NS	50 U	50 U	5 U	50 U	5 U	5 U	5 U	5 U	NS	5 U
Chlorobenzene	ug/L	NS	50 U	50 U	5 U	50 U	5 U	5 U	5 U	5 U	NS	5 U
Ethylbenzene	ug/L	NS	50 U	50 U	5 U	50 U	5 U	5 U	5 U	5 U	NS	5 U
Styrene	ug/L	NS	50 U	50 U	5 U	50 U	5 U	5 U	5 U	5 U	NS	5 U
Xylene (total)	ug/L	NS	50 U	50 U	5 U	50 U	5 U	5 U	5 U	5 U	NS	5 U

DUP = Duplicate sample
NS = Not sampled
U = Compound was analyzed for but not detected. Value shown is the method detection limit for quantification.
J = Indicates an estimated value.

**Table 2-4
Summary of Groundwater Analytical Results - November 2003
Black & Decker
Hampstead, Maryland**

PARAMETER	Units	RFW-1A	RFW-1B	RFW-2A	RFW-2B	RFW-3B	RFW-4A	RFW-4A (DUP)	RFW-4B	RFW-5A	RFW-6	RFW-7	RFW-8	RFW-9	RFW-10
Chloromethane	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NS	10 U	10 U	NS	10 U	NS
Bromomethane	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NS	10 U	10 U	NS	10 U	NS
Vinyl Chloride	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NS	10 U	10 U	NS	10 U	NS
Chloroethane	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NS	10 U	10 U	NS	10 U	NS
Methylene Chloride	ug/L	2 JB	4 JB	2 JB	2 JB	2 JB	5 B	2 JB	2 JB	NS	3 JB	2 JB	NS	3 JB	NS
Acetone	ug/L	10 U	5 J	10 U	10 U	4 J	10 U	10 U	10 U	NS	3 JB	2 JB	NS	10 U	NS
Carbon Disulfide	ug/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	NS
1,1-Dichloroethene	ug/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	NS
1,1-Dichloroethane	ug/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	NS
1,2-Dichloroethene (total)	ug/L	5 U	5 U	5 U	5 U	13	2 J	2 J	6	NS	1 J	5 U	NS	43	NS
Chloroform	ug/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	NS
1,2-Dichloroethane	ug/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	NS
2-Butanone	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NS	10 U	10 U	NS	10 U	NS
1,1,1-Trichloroethane	ug/L	5 U	5 U	5 U	5 U	2 J	5 U	5 U	5 U	NS	5 U	5 U	NS	3 J	NS
Carbon Tetrachloride	ug/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	NS
Bromodichloromethane	ug/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	NS
1,2-Dichloropropane	ug/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	NS
cis-1,3-Dichloropropene	ug/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	NS
Trichloroethene	ug/L	5 U	5 U	2 J	3 J	13	83	83	12	NS	7	7	NS	26	NS
Dibromochloromethane	ug/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	NS
1,1,2-Trichloroethane	ug/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	NS
Benzene	ug/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	NS
Trans-1,3-Dichloropropene	ug/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	NS
Bromoform	ug/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	NS
4-Methyl-2-pentanone	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NS	10 U	10 U	NS	10 U	NS
2-Hexanone	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NS	10 U	10 U	NS	10 U	NS
Tetrachloroethene	ug/L	5 U	5 U	5 U	5 U	10	69	68	76	NS	7	5 U	NS	25	NS
1,1,2,2-Tetrachloroethane	ug/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	NS
Toluene	ug/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	NS
Chlorobenzene	ug/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	NS
Ethylbenzene	ug/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	NS
Styrene	ug/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	NS
Xylene (total)	ug/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	NS

U = Compound was analyzed for but not detected. Value shown is the method detection limit for quantification.
J = Indicates an estimated value.

DUP = Duplicate sample
NS = Not sampled

Table 2-4
Summary of Groundwater Analytical Results - November 2003
Black & Decker
Hampstead, Maryland

PARAMETER	Units	RFW-11A	RFW-11B	RFW-12B	RFW-13	RFW-16	RFW-17	RFW-20	RFW-21	Town #21	Town #22	Town #23	Leister Dairy	Leister Res. #1	Leister Res. #2	Trip Blank
				(5)												
Chloromethane	ug/L	NS	10 U	50 U	10 U	NS	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NS	10 U
Bromomethane	ug/L	NS	10 U	50 U	10 U	NS	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NS	10 U
Vinyl Chloride	ug/L	NS	10 U	50 U	10 U	NS	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NS	10 U
Chloroethane	ug/L	NS	10 U	50 U	10 U	NS	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NS	10 U
Methylene Chloride	ug/L	NS	3 JB	35 B	2 JB	NS	2 JB	2 JB	4 JB	2 JB	2 JB	2 JB	1 JB	2 JB	NS	4 JB
Acetone	ug/L	NS	10 U	50 U	2 JB	NS	10 U	4 JB	10 U	10 U	10 U	10 U	10 U	10 U	NS	10 U
Carbon Disulfide	ug/L	NS	5 U	25 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U
1,1-Dichloroethene	ug/L	NS	5 U	25 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U
1,1-Dichloroethane	ug/L	NS	5 U	25 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U
1,2-Dichloroethene (total)	ug/L	NS	5 U	12 J	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U
Chloroform	ug/L	NS	5 U	25 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U
1,2-Dichloroethane	ug/L	NS	5 U	25 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U
2-Butanone	ug/L	NS	10 U	50 U	10 U	NS	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NS	10 U
1,1,1-Trichloroethane	ug/L	NS	5 U	25 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U
Carbon Tetrachloride	ug/L	NS	5 U	25 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U
Bromodichloromethane	ug/L	NS	5 U	25 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U
1,2-Dichloropropane	ug/L	NS	5 U	25 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U
cis-1,3-Dichloropropene	ug/L	NS	5 U	25 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U
Trichloroethene	ug/L	NS	63	560	28	NS	7	2 J	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U
Dibromochloromethane	ug/L	NS	5 U	25 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U
1,1,2-Trichloroethane	ug/L	NS	5 U	25 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U
Benzene	ug/L	NS	5 U	25 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U
Trans-1,3-Dichloropropene	ug/L	NS	5 U	25 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U
Bromoform	ug/L	NS	5 U	25 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U
4-Methyl-2-pentanone	ug/L	NS	10 U	50 U	10 U	NS	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NS	10 U
2-Hexanone	ug/L	NS	10 U	50 U	10 U	NS	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NS	10 U
Tetrachloroethene	ug/L	NS	1 J	33	81	NS	1 J	5 U	5 U	5 U	5 U	5 U	1 J	5 U	NS	5 U
1,1,2,2-Tetrachloroethane	ug/L	NS	5 U	25 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U
Toluene	ug/L	NS	5 U	25 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U
Chlorobenzene	ug/L	NS	5 U	25 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U
Ethylbenzene	ug/L	NS	5 U	25 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U
Styrene	ug/L	NS	5 U	25 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U
Xylene (total)	ug/L	NS	5 U	25 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U

DUP = Duplicate sample
NS = Not sampled
U = Compound was analyzed for but not detected. Value shown is the method detection limit for qt
J = Indicates an estimated value.

analytical data package is included in Appendix D.

As found in earlier sampling events at the Black & Decker facility, TCE and PCE were the VOCs detected at the highest concentrations in the groundwater samples. The highest concentration of TCE was detected in the groundwater samples collected from wells RFW-12B and EW-4 and the highest concentration of PCE was detected in the groundwater samples collected from wells EW-8 and RFW-13. Lower concentrations of 1,2-dichloroethene, 1,1,1-Trichloroethane and 1,1-Dichloroethane were also detected. EW-9 was not sampled due to a malfunction in the flow meter. The meter was not recording flow so it was thought that the well was down. The remainder of VOCs present were detected at levels well below the Federal Maximum Contaminant Levels (MCL).

3. OPERATION AND MAINTENANCE OF THE TREATMENT SYSTEM

A summary of the maintenance activities which were undertaken with the extraction and treatment system during the reporting period (October through December 2003) is provided in Table 3-1. This table is comprehensive in summarizing significant maintenance events or activities, while not including those activities considered unworthy of note (such as replacement of light bulbs, lubrication of moving parts as appropriate or other routine activities).

Table 3-1
Treatment System Maintenance Activities - 4th Quarter 2003
Black & Decker
Hampstead, Maryland

Date	Event/Corrective Action
November 2003	Flow meter in EW-9 not functioning, the well is pumping. A new meter has been ordered and will be replaced when it is received.

4. RECOMMENDATIONS

For the reporting period of October through December 2003, the treatment system continued to create a hydraulic boundary preventing off-site migration of groundwater. The extraction system will continue to operate as currently configured to pump and treat contaminated groundwater. Depth-to-water measurements will continue to be collected on a monthly basis in all site monitor wells to construct a groundwater elevation contour map for the site. The groundwater elevation contour map will be used to verify that the required area of groundwater capture is being maintained. If necessary, pumping rates will be adjusted to maintain groundwater capture due to seasonal fluctuations in groundwater elevations. The treatment system will also continue to operate as currently configured, as data collected have proven that the treatment system is fully effective in removing VOCs from the extracted groundwater.